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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,549	10/27/2005	Graeme Alexander	5253-00002	1418
26753 7590 12/01/2009 ANDRUS, SCEALES, STARKE & SAWALL, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202				
EXAMINER				
GRAY, JILL M				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
12/01/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/531,549

**Applicant(s)**

ALEXANDER ET AL.

**Examiner**

Jill Gray

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on August 25, 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-9, 11-31, 33-47 and 49-52 is/are pending in the application.
- 4a) Of the above claim(s) 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-31, 33-47, 49, 50 and 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/7/2009.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Pursuant to the entry of the amendment of April 7, 2009, the status of the claims is as follows: Claims 5, 10, 32, and 48 are cancelled. Claims 51 and 52 are new. Claims 1, 7, 8, 16, 25, 26, 28, and 42 have been amended. Claims 1-4, 6-9, 11-31, 33-47, and 49-52 are pending.

### ***Election/Restrictions***

2. Applicant's election of "metal oxides" as the fluxing agent and "magnesium silicate mineral" as the silicate mineral filler in the reply filed on April 7, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Accordingly, claim 51 is withdrawn from further consideration as being directed to a non-elected invention.

### ***Response to Amendment***

3. The Declaration under 37 CFR 1.132 filed April 7, 2009 is sufficient to overcome the rejection of claims 1-4, 6-31, 33-47, and 49-50 based upon *Romenesko et al.*, 6,433,049.

4. The rejection of claims 1-4, 6-31, 33-47, and 49-50 under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over *Romenesko et al.*, 6,433,049 B1 is withdrawn in view of applicants' arguments and Declaration submitted on April 7, 2009.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 6-9, 11-31, 33-47, 49-50, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dickinson, European Patent Application EP 0559382 A1 (Dickinson).

Regarding Independent claims 1 28 and 47

Dickinson discloses a fire resistant composition comprising 10-50% by weight of the total weight of the composition of a polymer base composition, about 5 to 60% by weight of an additive system exclusive of the inorganic oxide constituent, and a first inorganic oxide constituent and a second inorganic oxide constituent which melts at

temperatures of less than 1000°C and includes metal oxides, phosphorus oxides and boron oxide, as required by applicants. See entire document, and for example, abstract and column 5, lines 15-46 and column 8, lines 16-20. The additive system exclusive of the inorganic oxide constituent includes silicate mineral fillers such as mica. See column 6, lines 19-36. Regarding the requirement that after exposure to an elevated temperature the residue remaining is a ceramic in an amount of at least 40% by weight of the total fire resistant composition and wherein the source of fluxing oxide is present in an amount to provide the residue with fluxing oxide in an amount of from 1 to 15% by weight of the residue remaining after exposure to an elevated temperature experienced under fire conditions whereby the fluxing oxide provides binding of the particles of silicate mineral filler to form a coherent ceramic residue at temperatures encountered under fire conditions, Dickinson discloses the same type of composition contemplated by applicants. In particular, Dickinson discloses an organic polymer base, silicate mineral filler, and fluxing oxides, wherein said components are present within the same range as applicants. The same composition necessarily has the same properties. Accordingly, the examiner has reason to believe that the properties of the composition of Dickinson are the same as well, in the absence of factual evidence to the contrary. Moreover, since the prior art teachings set forth a composition whereby the amounts of each component are at least within the minimum required of present claims 1 and 28, and further discloses the formation of a stable char structure, and a rigid foam of ceramic ash (note column 6, line 38), the skilled artisan would reasonably presume that the composition of Dickinson functions in the same manner as applicant's after

exposure to elevated temperatures, and has the same or a substantially similar end composition, in the absence of factual evidence to the contrary. "Where the claimed and prior art products are identical or substantially in structure or composition, or are produced by identical or substantially processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911m F.2d 705, 709, 15 USPQ2d 1655, (Fed. Cir. 1990).

Regarding Dependent claims 2-4, 6-9, 11-20, 27-31, 33-45, and 49-50

Regarding claims 2 and 29, Dickinson discloses that the silicate mineral filler is present in an amount of about 5 to 60% by weight. See column 8, lines 16-20.

Regarding claims 3-4, 12-15, 24, 27, 30-31, 35, and 39-41, it is the examiner's position that Dickinson discloses the same type of composition contemplated by applicants. In particular, Dickinson discloses an organic polymer base, silicate mineral filler, and fluxing oxides, wherein said components are present within the same range as applicants. The same composition necessarily has the same properties. Accordingly, the examiner has reason to believe that the properties of the composition of Dickinson are the same as well, in the absence of factual evidence to the contrary.

Regarding claims 6 and 33, as set forth above, Dickinson discloses the formation of a stable char structure, and a rigid foam of ceramic ash (note column 6, line 38).

Regarding claims 7-9, 34, and 37, Dickinson discloses a mixture of inorganic oxides such as glass frits and that other components such as zinc borate can be added. Also, Dickinson discloses that a commercially available material "CEEPREE" can be used, wherein "CEEPREE" is a mixture of glass frits. See column 5, and column 6.

Regarding claims 9 and 36, Dickinson discloses that the first oxide melts between 350°C to 450°C and that the second inorganic oxide melts at temperatures between about 650°C and 1000°C. See column 5, lines 20-22 and 47-50.

Regarding claims 11 and 38, Dickinson discloses that his composition comprises at least one oxide of an element of the type contemplated by applicants, such as lead or boron.

Regarding claims 16-17 and 42-43, Dickinson discloses an organic base polymer that is of the same type set forth by applicants, such as rubber, polyolefins or vinyl polymers. See column 5, lines 6-15.

Regarding claim 18, Dickinson discloses that the polymer base composition comprises from 10 to 50% by weight of the composition. See column 8, line 17.

Regarding claim 19, Dickinson discloses a silicate mineral filler of the type set forth by applicants. See column 6, line 33.

Regarding claims 20 and 44, Dickinson discloses that his composition includes a first inorganic oxide and a second inorganic oxide, whereby said inorganic oxides can be metal oxides of iron, alkali metals, alkaline earth metals and zinc oxides. See column 5, lines 30-42.

Regarding claims 49-50, Dickinson discloses that his fluxing oxide comprises fluxing components that are of oxides of the type set forth by applicants. As to the language of "consisting essentially of", the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. For the purpose of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." In an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. See MPEP 2111.03.

Regarding claim 45, Dickinson discloses a fire resistant cable of the type set forth by applicants. See Figure 1.

Therefore, the teachings of Dickinson anticipate or in the alternative, render obvious the invention as claimed in present claims 1-4, 6-9, 11-20, 27-31, 33-45, 47, and 49-50.

8. Claims 21-23, 25-26, 46 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson, European Patent Application EP 0559382 A1 (Dickinson) in view of Romenesko et al., 6,433,049 B1 (Romenesko), as applied in the previous Office Action.



Dickinson is as set forth above, but does not teach the inclusion of a silicone polymer.

Romenesko is as set forth in the previous Office Action and teaches a fire resistant composition that can be used as cable and wire insulation, said composition comprising a polyolefin, a silicone polymer, and particulate silicate mineral filler, wherein each component is present in amounts within the present claimed ranges. See entire document, and for example, abstract and column 4, lines 10-20.

It would have been obvious to one having ordinary skill in the art to modify the composition of Dickinson by adding a silicone polymer, as taught by Romenesko with the reasonable expectation of the silicon polymeric material in the composition of Dickinson as modified by Romenesko becoming ceramified upon exposure to high temperature, and yielding a dense ceramic with excellent dimensional stability, strength and electrical insulating properties.

Therefore, the combined teachings of Dickinson and Romenesko would have rendered obvious the invention as claimed in present claims 21-23, 25-26, 46, and 52.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-4, 6-9, 11-31, 33-47, 49-50 and 52 have been considered but are moot in view of the new ground(s) of rejection.
10. No claims are allowed.

#### ***Conclusion***

11. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on April 7, 2009 prompted the new

ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jill Gray/  
Primary Examiner  
Art Unit 1794

jmg